

CPC**COOPERATIVE PATENT CLASSIFICATION****B41P****INDEXING SCHEME RELATING TO PRINTING, LINING MACHINES, TYPEWRITERS, AND TO STAMPS****NOTE**

This subclass constitutes an internal scheme for indexing only.

B41P 2200/00**Printing processes**

- B41P 2200/10 . Relief printing
- B41P 2200/11 .. Stereotype printing
- B41P 2200/12 .. Flexographic printing
- B41P 2200/13 .. Offset printing

- B41P 2200/20 . Lithography
- B41P 2200/21 .. Dry offset printing
- B41P 2200/22 .. Wet offset printing

- B41P 2200/30 . Heliography
- B41P 2200/31 .. Pad printing
- B41P 2200/312 ... multicolor

- B41P 2200/40 . Screen printing
- B41P 2200/41 .. Offset printing
- B41P 2200/42 .. Mimeographic printing, e.g. stencilling

B41P 2213/00**Arrangements for actuating or driving printing presses; Auxiliary devices or processes**

- B41P 2213/10 . Constitutive elements of driving devices ([driving reciprocating printing dies B41P 2219/10](#))
- B41P 2213/11 .. Motors
- B41P 2213/112 ... Fluid motors
- B41P 2213/114 Hydraulic motors
- B41P 2213/116 Linear hydraulic motors
- B41P 2213/118 Rotary hydraulic motors
- B41P 2213/12 Pneumatic motors
- B41P 2213/122 Linear pneumatic motors

- B41P 2213/124 . . . Electric motors
- B41P 2213/126 Rotary electric motors
- B41P 2213/128 Linear electric motors
- B41P 2213/13 Solenoids
- B41P 2213/20 .. Gearings
- B41P 2213/202 . . . Helical gears
- B41P 2213/204 . . . Bevel gears
- B41P 2213/206 . . . Planetary gears
- B41P 2213/208 . . . Harmonic drive
- B41P 2213/25 .. Couplings; Clutches
- B41P 2213/252 . . . Synchroclutches
- B41P 2213/254 . . . Devices allowing two gears to engage with each other
- B41P 2213/256 in a fixed angular position
- B41P 2213/30 .. Rotary energy transmitters, i.e. electric energy couplers
- B41P 2213/302 . . . using pneumatic energy, e.g. pressurised air
- B41P 2213/304 . . . using hydraulic energy

- B41P 2213/40 . Auxiliary devices or processes associated with the drives
- B41P 2213/42 .. Vibration-dampers for machine parts ([for cylinders B41F 13/08A](#))
- B41P 2213/44 .. Noise reduction
- B41P 2213/46 .. Lubrication

- B41P 2213/70 . Driving devices associated with particular installations or situations
- B41P 2213/71 .. Inching drive mechanism, i.e. to obtain stepwise movement
- B41P 2213/72 .. Driving devices for monocolour presses
- B41P 2213/73 .. Driving devices for multicolour presses
- B41P 2213/732 . . . with means for deviating torque over the printing units
- B41P 2213/734 . . . each printing unit being driven by its own electric motor, i.e. electric shaft

- B41P 2213/80 . Means enabling or facilitating exchange of cylinders ([exchanging tubular printing plates B41P 2227/20](#))
- B41P 2213/802 .. axially
- B41P 2213/804 .. radially

- B41P 2213/90 . Register control
- B41P 2213/91 .. for sheet printing presses

- B41P 2215/00 Screen printing machines**

- B41P 2215/10 . characterised by their constructional features
- B41P 2215/11 .. Registering devices
- B41P 2215/112 . . . with means for displacing the frame
- B41P 2215/114 . . . with means for displacing the article
- B41P 2215/12 .. Screens

- B41P 2215/13 .. Devices for increasing ink penetration
- B41P 2215/132 ... by increasing pressure above the screen
- B41P 2215/134 ... by increasing pressure beneath the screen
- B41P 2215/14 .. Devices or methods for reducing snap effect
- B41P 2215/50 . Screen printing machines for particular purposes
- B41P 2215/55 .. for printing compact discs
- B41P 2215/56 .. for printing ceramic tiles

B41P 2217/00 Printing machines of special types or for particular purposes

- B41P 2217/10 . characterised by their constructional features
- B41P 2217/11 .. Machines with modular units, i.e. with units exchangeable as a whole
- B41P 2217/12 .. Machines with reversible printing units
- B41P 2217/13 .. Machines with double or multiple printing units for "flying" printing plates exchange
- B41P 2217/14 .. Machines with constructions allowing refurbishing, converting or updating existing presses
- B41P 2217/15 .. Machines with cylinders only supported on one side, e.g. cantilever construction
- B41P 2217/50 . Printing presses for particular purposes
- B41P 2217/51 .. for printing individualised books
- B41P 2217/52 .. for printing a long repeat length on webs
- B41P 2217/53 .. for printing on the interior of hollow articles
- B41P 2217/55 .. for printing compact discs
- B41P 2217/56 .. for printing ceramic tiles
- B41P 2217/60 .. Means for supporting the articles
- B41P 2217/61 ... internally, e.g. for mugs or goblets
- B41P 2217/62 ... externally, e.g. for bottles

B41P 2219/00 Printing presses using a heated printing foil

- B41P 2219/10 . Driving devices for the reciprocating die
- B41P 2219/11 .. Hydraulic or pneumatic motors
- B41P 2219/12 .. Electric motors
- B41P 2219/13 .. Gearings
- B41P 2219/132 ... Cams or eccentrics
- B41P 2219/134 ... Knee-lever
- B41P 2219/20 . Arrangements for moving, supporting or positioning the printing foil
- B41P 2219/21 .. Supports for the unwinding roll; Braking devices for the unwinding roll
- B41P 2219/22 .. Guiding or tensioning the printing foil
- B41P 2219/23 .. Winding up the printing foil
- B41P 2219/30 . Printing dies

- B41P 2219/31 .. Heating means
- B41P 2219/32 .. with means for attaching printing elements to the holder
- B41P 2219/33 .. Supports for printing dies

- B41P 2219/40 . Material or products to be decorated or printed
- B41P 2219/41 .. Web-like material
- B41P 2219/42 .. Sheet-like material
- B41P 2219/43 .. Three-dimensional articles
- B41P 2219/432 ... Pencils
- B41P 2219/434 ... Books, e.g. edge-gilding

- B41P 2219/50 . combined with existing presses
- B41P 2219/51 .. Converting existing presses to foil printing presses
- B41P 2219/60 . Using more than one printing foil

B41P 2227/00 Mounting or handling printing plates; Forming printing surfaces in situ

- B41P 2227/10 . Attaching several printing plates on one cylinder
- B41P 2227/11 .. in axial direction
- B41P 2227/12 .. in circumferential direction
- B41P 2227/20 . Means enabling or facilitating exchange of tubular printing or impression members, e.g. printing sleeves, blankets ([attaching cylindrical printing formes B41F 27/10B](#))
- B41P 2227/21 .. Means facilitating exchange of sleeves mounted on cylinders without removing the cylinder from the press
- B41P 2227/30 . Detecting the correct position of printing plates on the cylinder
- B41P 2227/40 . Adjusting means for printing plates on the cylinder
- B41P 2227/41 .. axially
- B41P 2227/42 .. circumferentially
- B41P 2227/43 .. diagonally
- B41P 2227/50 . Devices for storing printing plates
- B41P 2227/60 . Devices for transferring printing plates
- B41P 2227/61 .. using the sheet feed system
- B41P 2227/62 .. Devices for introducing printing plates
- B41P 2227/63 .. Devices for removing printing plates
- B41P 2227/70 . Forming the printing surface directly on the form cylinder

B41P 2231/00 Inking devices; Recovering printing ink

- B41P 2231/10 . Axially segmented ducter rollers

- B41P 2231/12 . Axially segmented ink blades
- B41P 2231/20 . Recovering printing ink
- B41P 2231/21 .. by using mixtures of ink and water or repellent

B41P 2233/00 Arrangements for the operation of printing presses

- B41P 2233/10 . Starting-up the machine
- B41P 2233/11 .. Pre-inking
- B41P 2233/12 .. Pre-wetting
- B41P 2233/13 .. Pre-registering
- B41P 2233/20 . Safety devices preventing damage
- B41P 2233/21 .. by cutting the web in case of web break
- B41P 2233/22 .. by deviating the web in case of web break
- B41P 2233/23 .. by preventing the web winding up around cylinders
- B41P 2233/30 . Measuring or controlling the consumption of ink
- B41P 2233/50 . Marks on printed material
- B41P 2233/51 .. for colour quality control
- B41P 2233/52 .. for registering

B41P 2235/00 Cleaning

- B41P 2235/10 . characterised by the methods or devices
- B41P 2235/12 .. using laser energy
- B41P 2235/14 .. using ultrasonic energy
- B41P 2235/20 .. Wiping devices
- B41P 2235/21 ... Scrapers, e.g. absorbent pads
- B41P 2235/22 ... Rollers
- B41P 2235/23 ... Brushes
- B41P 2235/24 ... using rolls of cleaning cloth
- B41P 2235/242 Unwinding the cleaning cloth
- B41P 2235/244 Rewinding the cleaning cloth
- B41P 2235/246 Pressing the cleaning cloth against the cylinder
- B41P 2235/26 .. Spraying devices
- B41P 2235/27 .. Suction devices
- B41P 2235/30 . Recovering used solvents or residues
- B41P 2235/31 .. by filtering
- B41P 2235/32 .. by distilling
- B41P 2235/33 .. by burning

B41P 2235/40 . Cleaning restricted areas on cylinders

B41P 2235/50 . Selection of materials or products for cleaning

B41P 2251/00 Details or accessories of printing machines not otherwise provided for

B41P 2251/10 . Pumps

B41P 2251/11 . . Membrane pumps

B41P 2251/112 . . Peristaltic pumps

B41P 2700/00 Manifolding, printing or duplicating for office purposes

B41P 2700/10 . Hectographic line duplicators

B41P 2700/12 . . with single master plates